

CLAIMS

What is claimed is:

1. A cassette seal for a machine that is exposed to a large amount of external dust or dirt particles comprising at least one dust barrier, said barrier being disposed between an outer ring and an inner ring, wherein the at least one dust barrier consists of a nonwoven material impregnated with a polymer dispersion.
2. The cassette seal according to Claim 1, wherein the nonwoven material is impregnated with an aqueous PTFE dispersion.
3. The cassette seal according to Claim 2, wherein the nonwoven material impregnated with an aqueous PTFE dispersion is disposed at one of a surface of an outer ring or a surface of an inner ring that axially face each other.
4. The cassette seal according to Claim 1, wherein the nonwoven material is firmly connected with the outer ring or the inner ring.
5. The cassette seal according to Claim 1, wherein the nonwoven material is disposed in a sealing manner at a rotating surface and/or at a radial flange of the inner ring.

6. The cassette seal according to Claim 5, wherein the nonwoven material is provided with a sealing lip that rests on the rotating surface of the inner ring.

7. The cassette seal according to Claim 1, wherein the nonwoven material is fastened to a radial flange of the inner ring and has a sealing lip that extends outward and rests on the outer ring.

8. The cassette seal according to Claim 7, wherein another nonwoven material is disposed on an axially outward oriented surface of the flange, said another nonwoven material having a radially outward extending sealing lip that rests on the outer ring.

9. The cassette seal according to Claim 1, wherein the nonwoven material is inserted between the outer ring and the inner ring.

10. The cassette seal according to Claim 9, wherein the inner ring is provided with an axially oriented leg that extends into an annular space formed by a stiffening body of the outer ring.

11. The cassette seal according to Claim 10, wherein the nonwoven material is wedged between the leg and the outer ring.

12. The cassette seal according to Claim 10, wherein the nonwoven material is wedged between a surface of the outer ring and a surface inner ring that axially face each other.

13. The cassette seal according to Claim 12, wherein the nonwoven material comprises an inner edge and an outer edge, and the nonwoven material rests with its inner edge on a rotating surface and/or with its outer edge on the leg of the inner ring.

14. The cassette seal according to Claim 1, wherein the inner ring is provided with at least one sealing lip that rests on a stiffening body of the outer ring and/or a housing wall of the machine.

15. A cassette seal comprising:
a housing;
an inner ring including a support ring;
an outer ring including a stiffening ring ; and
a PTFE-nonwoven material disposed between the support ring and the stiffening ring.

16. The cassette seal according to claim 15, wherein the support ring includes an elastomer including a plurality of dust lips.

17. The cassette seal according to claim 15, wherein the PTFE-nonwoven material includes a sealing lip that rests on a rotating surface of the inner ring.

18. The cassette seal according to claim 15, wherein the support ring further comprises an axially oriented leg; and

another PTFE-nonwoven material is disposed between the axially oriented leg of the inner ring and the stiffening ring.

19. The cassette seal according to claim 15, wherein the support ring further comprises a radial flange; and the PTFE-nonwoven material is fastened to the radial flange.

20. The cassette seal according to claim 19, wherein the PTFE-nonwoven material includes a sealing lip that extends outward radially and rests on the outer ring.

21. The cassette seal according to claim 15, wherein the PTFE-nonwoven material includes an inner edge that forms a sealing lip that rests on a rotating surface of the inner ring; and

an outer edge that forms another sealing lip that rests on a projection of the inner ring.